## State of Hawaii DEPARTMENT OF LAND AND NATURAL RESOURCES Engineering Division Honolulu, Hawaii 96813

August 12, 2011

Board of Land and Natural Resources State of Hawaii Honolulu, Hawaii

Request Authorization to Select Consultants and Authorize the Chairperson to Negotiate and Execute Agreements with Consultants and/or Government Agencies as Necessary to Administer HRS Chapter 179D, Entitled the Dam and Reservoir Safety Act of 2007

The Engineering Division (Division) desires to select consultants and execute agreements with Consultants and/or government agencies as necessary for the below listed projects and services to properly implement and administer the Dam and Reservoir Safety Act of 2007, HRS Chapter 179D. Funding for this work will be provided primarily from the Dam and Reservoir Safety Special Fund and supplemented from the Federal Department of Homeland Security, National Dam Safety Program Grant and the Land and Natural Resources 810 Program Operating Fund Budget.

- 1. Dam Safety Emergency Management Monitoring Systems. Budget \$ 40,000 Project will consist of the installation of various reservoir monitoring instrumentation and related office supporting equipment, software and applications to monitor and record data from selected reservoirs statewide. Project to include any required maintenance contracts with local internet providers to facilitate data transfer from remote locations to the data collection server. Currently the Engineering Division partners with the USGS and private dam owners to monitor 7 dams and levees statewide. The division will start to supplement this effort at additional dam and reservoir sites statewide for more comprehensive status of dams and reservoir during heavy rain events.
- 2. Dam Failure Mapping and Hazard Assessment.

  Budget \$ 80,000

  The Division desires to contract with the Pacific Disaster Center (PDC), under management by the Research Corporation of the University of Hawaii (RCUH) to conduct dam failure model simulations of selected dams statewide, along with a detailed hazard assessment of the modeled area and evacuation mapping documentation. The Division has already worked with the PDC to provide dam failure modeling of almost all regulated dams statewide.

  Additional structures have been identified for possible inclusion into the regulatory program and will be evaluated to determine their appropriate hazard classification.
- 3. Dam Assessment and Technical Services.

  Budget \$ 150,000

  The Division utilizes consultant services for inspection and assessment of existing dam facilities statewide. The Division also utilizes consultant services to aid in the technical review of proposed dam safety guidelines and dam safety construction, alteration, expansion

and removal permits. Many of these permits require additional technical services and resources that exceed those currently available on staff.

## **RECOMMENDATIONS:**

- 1. That the Board of Land and Natural Resources (Board) authorize the Chairperson to select consultants for the projects indicated and authorize the Chairperson to negotiate and execute agreements for the aforementioned projects, subject to available funding and review and approval by the Department of the Attorney General.
- 2. That the Board authorize the Chairperson, subject to review and approval by the Department of the Attorney General, to enter into supplemental contracts to address unforeseen conditions and to exercise options as provided in contract documents, and to sign the necessary documents to implement the additional work and/or time with the consultants.

Respectfully submitted,

APPROVED FOR SUBMITTAL:

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WILLIAM J. AILA, JR., Chairperson

Board of Land and Natural Resources